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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,884	01/05/2001	Christoph Lodde	44815/251563	4102

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EXAMINER
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CHANG, VICTOR S

ART UNIT	PAPER NUMBER
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1771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/755,884

Applicant(s)

LODDE, CHRISTOPH

Examiner

Victor S. Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-9 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-9 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Introduction***

1. Applicant's declaration, amendments and remarks filed on 11/20/2006 have been entered. Claim 1 has been amended. Claims 1-3, 5-9 and 12 are active.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. In response to the amendment and arguments, prior art Hanson has been withdrawn. However, a new search is required, and the grounds of rejections have been rewritten as set forth below. Applicant's argument directed to Hanson is moot.

### ***Rejections Based on Prior Art***

4. Claims 1-3, 5-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mamish [US 5227225] in view of Dunshee et al. [US 5914282].

Mamish's invention [abstract; col. 1, lines 26-27 and 56-67] relates to a cost-effective method for preparing masking tapes by coating a layer of a polyolefin onto a lightweight nonwoven cloth and then applying a layer of adhesive onto an opposed surface of the nonwoven cloth. The polyolefin layer coats the nonwoven and invades (impregnated or imbued) its interstices, so that the nonwoven is "embedded" in the polyolefin, and is not a discrete layer. The polyolefin acts as a barrier against adhesive migration.

For claim 1, Mamish lacks a teaching that acrylate resins or polyurethane resins are suitable barrier materials for a nonwoven based adhesive backing. However, Dunshee's

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invention [abstract; col. 2, lines 26-38; col. 7, lines 38-42] relates to an adhesive sheet comprising a nonwoven backing with a polymeric migration barrier. The adhesive sheet is used to make a pressure-sensitive adhesive tape. Suitable polymers for the nontacky migration barrier layer are acrylate copolymers or polyurethanes. It would have been obvious to one of ordinary skill in the art of adhesive tape to select an alternate functionally equivalent barrier polymer to substitute the polyolefin of Mamish, such as the acrylate copolymer or polyurethane taught by Dunshee, because the selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination. See MPEP § 2144.07. Further, since Dunshee teaches the same polymer compositions for the same use as the instant invention, the property term “thermoplastic” is considered to be either inherently the same, or obviously provided, once the same material is selected. Similarly, since Mamish teaches the same impregnated structure as the instant invention, the term “achieving cohesion of the fibers” is also considered to be inherently disclosed by Mamish. Finally, regarding the basis weights of the nonwoven and the thermoplastic resin, since Mamish teaches the same subject matter for the same use (a masking tape) as the instant invention, suitable basis weights of the nonwoven and thermoplastic resin are reasonably considered to be obvious optimizations to one skilled in the art of masking tape, motivated by the desire to obtain a cost-effective masking tape.

For claims 2 and 3, Mamish teaches [col. 3, lines 17-23] that the nonwoven is produced by known manner in the art, such as subjecting the fibers to carding, scrambling, chemically or thermally bonded, or hydroentangled (water jets). Regarding the product-by-process limitation “needling in a needle bed”, since the process limitation has not been shown on the record to

produce a patentably distinct article, the formed articles are rendered *prima facie* obvious, and this limitation at the present time has not been given patentable weight.

For claim 5, Mamish teaches [col. 3, lines 14-17] that suitable synthetic fibers for the nonwoven include the rayons, polyesters, etc.

For claim 6, Mamish teaches [col. 3, lines 30-46] that the adhesives may be any of those heretofore employed in the art for preparing masking tapes, such as rubbery block copolymers, etc.

For claims 7 and 8, since Mamish teaches the same subject matter for the same use (a masking tape) as the instant invention, a suitable basis weight for the adhesive coating is reasonably considered to be an obvious routine optimization to one of ordinary skill in the art of masking tape, motivated by the desire to obtain a required adhesion strength.

For claim 12, since the process limitation “imbued by dipping or spraying” has not been shown on the record to produce a patentably distinct article, the formed articles are rendered *prima facie* obvious, and this limitation at the present time has not been given patentable weight.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mamish [US 5227225] in view of Dunshee et al. [US 5914282] and Hansen et al. [US 4133731].

The teachings of Mamish and Dunshee are again relied upon as set forth above.

For claim 9, Mamish lacks a teaching that the adhesive coating comprises a UV crosslinkable acrylate adhesive. However, since Mamish teaches [col. 3, lines 31-32] that the adhesives may be any of those heretofore employed in the art for preparing masking tapes, and Hansen’s invention [abstract; col. 5, lines 49-51; col. 8. lines 34-35] relates to UV curable (crosslinkable) acrylate adhesive for masking tapes, it would have been obvious to one of

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ordinary skill in the art to make Mamish's masking tape with Hansen's UV crosslinkable pressure sensitive adhesive, because the selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination. See MPEP § 2144.07.

### ***Response to Argument***

6. Applicant argues at Remarks page 6 that the claim has been amended to recite a textile adhesive tape consisting essentially of a two part system, whereas Mamish discloses a three-layer tape. However, Mamish teaches that the polyolefin layer coats the nonwoven and invades (impregnated or imbued) its interstices, so that the nonwoven is "embedded" in the polyolefin, and is not a discrete layer. In other words, Mamish teaches an embodiment that the nonwoven is surrounded by polyolefin and formed as one single layer, which reads on the structure of the instant invention as claimed.

Applicant argues at page 7 that the adhesive coating in applicant's tape is adjacent to and at one side of that tape support, and Mamish describes adhesive tapes have three layers or more. However, since Mamish teaches that an adhesive layer is coated after polyolefin coating, Mamish clearly teaches that the adhesive coating is adjacent to and at one side of the tape support. Further, since Mamish teaches an embodiment that the nonwoven is embedded in polyolefin and forms as a single layer as set forth above, Mamish teaches a two-layer structure as claimed.

Referring to the declaration, applicant argues that the basis weight of impregnation (bwi) of instant invention at 1 to 5 g/m<sup>2</sup> is less than 13.7% of absolute minimum real disclosed value according to the coextrusion process of Mamish, and argues that 1 to 5 g/m<sup>2</sup> would not have been

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sufficient for coating the surface and embedding a light weight nonwoven by the coextrusion process described by Mamish. A careful review shows that applicant's "absolute minimum real disclosed value" is in fact a calculated value based on the density of polyolefin and an impregnated layer thickness (see paragraph 6 of the declaration), and applicant's calculated bwi appears to be based on the minimum thickness described in Mamish reference. However, since Mamish teaches essentially the same subject matter for the same use (a masking tape) as the instant invention, and nowhere has Mamish set a minimum thickness for the masking tape, the examiner maintains that a suitable thickness or bwi is reasonably considered to be an obvious routine optimization to one skilled in the art of masking tape, motivated by the desire to provide a functional product at a minimum cost.

Applicant argues at page 8 that the nature of the barrier coat and other elements of the Mamish reference imply that some adhesive does enter at least part-way through the porous backing fiber. However, since Mamish teaches an embodiment that the nonwoven is embedded in polyolefin, and is not a discrete layer, it is not seen how an adhesive layer would have entered an embedded porous nonwoven whose pores have already been impregnated by polyolefin.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**


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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Victor S Chang  
Examiner  
Art Unit 1771

1/9/07